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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/475,186 Filing Date: December 30, 1999 Appellant(s): LIM ET AL.

Carl R. Wesolowski For Appellant

EXAMINER'S ANSWER

Art Unit: 2684

This is in response to the appeal brief filed 28 June 2004.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

Note that Examiner withdraws the rejection for claims 17 and 18 under 35 U.S.C. § 112 only (see page 21 below for details).

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

Appellant's brief includes a statement that claims 1-20 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

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(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

6,292,667 Wallentin et al. 18-2001

6,240,083 Wright et al. 05-2001

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

1. Claims 1 – 20 are rejected under 35 U.S.C. Wallentin et al (Wallentin, US Patent No. 6,292,667) in view of Wright et al. (Wright, US Patent No. 6,240,083).

Regarding claim 1, Wallentin teaches of a system for controlling a packet data service in a mobile communication network (Figure 1 and column 4, lines 53 – 58), comprising a plurality of radio network controllers, wherein each of said radio network controllers assigns a radio channel to a packet data service active terminal and controls a data service path for said active terminal (as seen in Figure 1; column 6, lines 14 – 22; and column 2, lines 11 – 14; column 4, lines 53 –58) and a location management unit that manages service state information, location information and connection information of said active terminal (column 4, lines 45 –53 and column 6, lines 55 – 65 and column 13, lines 40 –51), wherein, when said active terminal moves from a first one of said radio network controllers to a second one of said radio network controllers in a suspended state or a dormant state, information(s) of said active terminal are maintained between said first and second radio network controllers under control of said location management unit (column 6, lines 55 – 63 and in column 10, lines 40 –50 and again in column 12, lines 38 –45 and column 13, lines 40 – 51).

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Wallentin does not specifically teach of the radio network controllers assigning a radio channel to a packet data service active terminal and of while in a suspended or a dormant state, medium access control layer state information and radio resource control information of said active terminal are maintained.

In a related art dealing with accessing a network, Wright teaches of the radio network controllers assigning a radio channel to a packet data service active terminal (column 4, lines 57 –61 and column 9 lines 36 – 46 and column 31, lines 25 –65) and of while in a suspended or a dormant state, medium access control layer state information and radio resource control information of said active terminal are maintained (column 6, lines 34 – 50 and column 28, lines 5 – 8 and column 31, lines 25 –65).

It would have been obvious to one skilled in the art at the time of invention to have included into Wallentin's system of mobile communications, Wright's concepts of channel accessing, for the purposes of efficiently reserving the channel thus prevent collision of messages between devices, as taught by Wright.

Regarding claim 2, Wallentin in view of Wright, teach all the claimed limitations as recited in claim 1. Wallentin further teaches of further comprising a packet data node for maintaining a point-to-point protocol link with said active terminal through a serving one of said radio network controllers to process one of an incoming signal from said active terminal and an outgoing signal to said active terminal (column 13, lines 40 – 48).

Regarding claim 3, Wallentin in view of Wright, teach all the claimed limitations as recited in claim 2. Wallentin further teaches that the said second radio network controller is adapted to receive packet data node routing information from said first radio network controller

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and transfer a node link message to said packet data node to notify the packet data node that said active terminal has moved to said second radio network controller (column 4, lines 53 – 58).

Regarding claim 4, Wallentin in view of Wright, teach all the claimed limitations as recited in claim 1. Wallentin further teaches that further comprising a mobile switching center and a visitor location register, wherein said location management is provided to said mobile switching center and visitor location register column 11, lines 4-21).

Regarding claim 5, Wallentin in view of Wright, teach all the claimed limitations as recited in claim 4. Wallentin teaches of a packet control function entity adapted to establish a virtual circuit between a serving one of said radio network controllers and one of a target one of said radio network controllers (seen in Figure 1 and detailed starting column 6 line 55 and ending column 7 line 8), wherein said packet control function entity is provided said mobile switching center and visitor location register (column 13, lines 13 – 21 and lines 40 – 48). Wright further teaches and a packet data node (column 9, lines 36 – 46).

Regarding claim 6, Wallentin in view of Wright, teach all the claimed limitations as recited in claim 1. Wallentin further teaches that wherein said suspended state is a state where a traffic channel, a power control channel and a radio resource control channel are released between said active terminal and a serving one of said radio network controllers, and wherein a radio link protocol state and a point-to-point protocol state are maintained between said active terminal and said serving radio network controller (column 2, lines 1 –7) and wherein said dormant state is a state where a radio connection is released between said active terminal and said serving radio network controller and only said point-to-point protocol state is maintained between said active terminal and a packet data node (column 13, lines 40 – 48).

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Regarding claim 7, Wallentin in view of Wright, teach all the claimed limitations as recited in claim 1. Though Wallentin in view of Wright do not specifically teach that wherein said mobile communication network is an IMT-2000/PCS/cellular communication network, it is well known in the art that IMT-2000 is in fact third generation-packet switched network and therefore commonly used as 3G rolls out and thus Examiner takes "Official Notice" of such. It therefore it would have been obvious to one skilled in the art at the time of invention to have used the invention in a IMT-2000 network, as this network will be a packet switched network (by definition).

Regarding claim 8, Wallentin teaches of a radio communication network that includes a plurality of radio network controllers (seen in Figure 1), a method for operating a mobile communication network, comprising moving a packet data service active terminal from an old one of said radio network controllers to a new one of said radio network controllers in at least one of a suspended state and a dormant state (column 10, lines 40 – 45; column 13, lines 40 –51), transferring information and radio resource control information of said active terminal from said old radio network controller to said new radio network controller through a location management function entity (column 6, lines 55 – 65; column 13, lines 40 –51; and column 6, lines 55 –65), and maintaining said information and radio resource control information of said active terminal between said old and new radio network controllers (column 6, lines 55 – 65 and column 13, lines 40 –51; and column 6, lines 55 –65).

Wallentin does not teach of the medium access control (MAC) layer, specifically of a suspended medium access control (MAC) layer state and a dormant MAC layer state, transferring MAC layer state information and maintaining said MAC layer state information.

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In a related art dealing with accessing a network, Wright teaches of suspended medium access control (MAC) layer state and a dormant MAC layer state, transferring MAC layer state information and maintaining said MAC layer state information (starting column 28, line 5 and ending column 30, line 65 and column 31, lines 25 –65).

It would have been obvious to one skilled in the art at the time of invention to have included into Wallentin's system of mobile communications, Wright's concepts of channel accessing, for the purposes of efficiently reserving the channel thus prevent collision of messages between devices, as taught by Wright.

Regarding claim 9, Wallentin in view of Wright, teach all the claimed limitations as recited in claim 8. Wallentin further teaches that the location management device is in a mobile switching center and provides radio packet data service (column 11, lines 15 –25).

Regarding claim 10, Wallentin teaches of a method for controlling a packet data service in a mobile communication network of a radio communication network that includes a plurality of radio network controllers, at least one location management function device to provide a radio packet data service, (seen in Figure 1 and detailed in column 4, lines 45 – 53) the method comprising allowing a packet data service active terminal to move from a current one of said radio network controllers to a target one of said radio network controllers (seen in Figure 1, column 4, lines 45-52), allowing said active terminal to detect a received pilot signal and check a system overhead message (column 9, lines 62 – 64; note a paging message is a system overhead message), and allowing said active terminal to determine whether to perform a handoff operation at a suspended state (column 6, lines 55 – 63 and column 10, lines 40 - 45).

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Wallentin does not specifically teach of a packet data node allowing a packet data service active terminal to move from a current one of said radio network controllers to a target one of said radio network controllers under the condition that only a point-to-point protocol state is maintained between said active terminal and said packet data node and allowing said active terminal to request said current radio network controller to permit its change to one of a dormant state and an active state when the determination is that said active terminal is to perform the handoff operation in said suspended state.

In a related art dealing with accessing a network, Wright teaches of a packet data node allowing a packet data service active terminal to move from a current one of said radio network controllers to a target one of said radio network controllers under the condition that only a point-to-point protocol state is maintained between said active terminal and said packet data node (column 9, lines 36 – 46) and allowing said active terminal to request said current radio network controller to permit its change to one of a dormant state and an active state when the determination is that said active terminal is to perform the handoff operation in said suspended state (starting column 28, line 5 and ending column 30, line 65).

It would have been obvious to one skilled in the art at the time of invention to have included into Wallentin's system of mobile communications, Wright's concepts of channel accessing, for the purposes of efficiently reserving the channel thus prevent collision of messages between devices, as taught by Wright.

Regarding claim 11, Wallentin in view of Wright, teach all the claimed limitations as recited in claim 10. Wright further teaches the step of allowing said current radio network controller to transfer radio link protocol state information and radio resource control information

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of said active terminal to said target radio network controller under control of said location management function entity if said active terminal is changed to said dormant state (column 28, lines 11 - 38).

Regarding claim 12, Wallentin in view of Wright, teach all the claimed limitations as recited in claim 10. Wallentin further teaches that active terminal is changed to said dormant state, the method further comprises the step of allowing said location management function entity to transfer an overhead message to said target radio network controller to notify the target radio network controller that an inter radio network controller handoff operation is executed (column 9, lines 62 - 64 and column 10, lines 40 - 50).

Regarding claim 13, Wallentin in view of Wright, teach all the claimed limitations as recited in claim 12. Wright further teaches that said active terminal is not to perform the handoff operation in said suspended state (column 27, lines 58 -62), the method further comprises the step of allowing said current radio network controller to detect a location of said active terminal and prevent the change to said dormant state (column 9, lines 44 -64).

Regarding claim 14, Wallentin in view of Wright, teach all the claimed limitations as recited in claim 10. Wallentin further teaches that the location management function device is in a mobile switching center (column 11, lines 15 - 17).

Regarding claim 15, Wallentin in view of Wright, teach all the claimed limitations as recited in claim 10. Though Wallentin in view of Wright do not specifically teach that wherein said mobile communication network is an IMT-2000/PCS/cellular communication network, it is well known in the art that IMT-2000 is in fact third generation-packet switched network and therefore commonly used as 3G rolls out and thus Examiner takes "Official Notice" of such. It

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therefore it would have been obvious to one skilled in the art at the time of invention to have used the invention in a IMT-2000 network, as this network will be a packet switched network (by definition).

Regarding claim 16, Wallentin in view of Wright, teach all the claimed limitations as recited in claim 1. Wallentin further teaches of wherein a handoff is initiated from the first radio network controller to the second radio network controller responsive to said movement of said active terminal to control of the second radio network controller in the suspended state or the dormant state (as seen in Figure 1 and column 4, lines 45 – 53 and column 10, lines 40 – 45 and column 6, lines 55 - 63).

Regarding claim 17. Wallentin in view of Wright teach all the claimed limitations as recited in claim 16. Wallentin further teaches of wherein the handoff is an active handoff from said first radio network controller to the second radio network controller (as seen in Figure 1 and column 4, lines 45 - 53 and column 10, lines 40 - 45 and column 6, lines 55 - 63).

Regarding claim 18, Wallentin in view of Wright teach all the claimed limitations as recited in claim 17. Wallentin further teaches of wherein said active terminal in said suspended state is transferred to one of said active state and said dormant state responsive to the location management unit before said active handoff (as seen in Figure 1 and column 4, lines 45 – 53 and column 10, lines 40 - 45 and column 6, lines 55 - 63).

Regarding claim 19, Wallentin in view of Wright teach all the claimed limitations as recited in claim 1. Wallentin further teaches of wherein a handoff is initiated from the first radio network controller to the second radio network controller responsive to a status change caused by Art Unit: 2684

said movement (column 6, lines 49 - 59 and Figure 1; note handovers are normally performed with respect to movement, such as when a mobile is moving from cell to cell).

Regarding claim 20, Wallentin in view of Wright teach all the claimed limitations as recited in claim 8. Wallentin further teaches of wherein the moving a packet data service active terminal is responsive to a status change caused by movement by the active terminal to an area controlled by said new radio network controller (column 6, lines 49 – 59 and Figure 1; note handovers are normally performed with respect to movement, such as when a mobile is moving from cell to cell ad column 12, lines 35 – 53 and column 11, lines 21 – 26).

(11) Response to Arguments

Response to Appellant's arguments, Issue 1, claims 1-9 and 17-20.

With respect to claim 1, Appellant states, "Applicant's respectfully submit the core network in Wallentin is not in forward communication with a mobile station during an idle state, but merely receives a location registration, when the MS moves from one area to another in an idle state," citing as evidence, column 11, lines 4 – 26. Examiner respectfully disagrees that forward communications are not occurring (forward assumed to be defined as from the network to the mobile, as commonly known in the art) as later Wallentin states, "The mobile station... receives a page message over the interface from base station..." and continues that, "In response to the page message... the mobile returns... a paging message response (Wallentin: column 12, lines 37 –43), thus indicating that forward (and reverse) communications are occurring between the network and the mobile.

Continuing, Appellant states, "In summary, the core network shown in Figs. 1 –2 of Wallentin discloses providing a location registration (see column 2, lines 1 – 16 of Wallentin),

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but not MAC state information and radio resource control information of a terminal or a point-topoint protocol (PPP) connection between a new RNC and an active terminal." Initially note that with respect to claims 1 and 8, the limitations of "point-to-point protocol" (PPP) as known and defined in the art (a protocol that allows for connection to the Internet via a direct connection) are not explicitly stated in claimed language and hence Examiner did not read theses concepts into the claimed language (though it should be noted that Wallentin does teach of a direct packet switched connection, namely using GPRS or General Packet Radio System, which does allow for a point-to-point or PPP direct connection between the Internet and a mobile station in this case, as per column 1, lines 34 –39). It is respectfully believed that Wallentin does allude to such concepts as MAC (Medium Access Control) layer and radio resource control information (though does not explicitly state these terms), for example where a mobile is connected to the network in packet mode and moves to a new cell during a period of no data transfer (as per column 2, lines 38 -47; note that packet transmissions are bursty in nature and thus dedicated channels and thus continuous reserved radio resources are not continuously set aside, as per column 4, lines 1 -5; Wallentin subsequently details how his invention overcomes issues related to location management for both circuit and packet switched mobiles, as per column 4, lines 24 -27) and further in column 4, lines 53 - 58 (with relation to the concepts of area routing, as in light of the background issues noted above) and again in relation to column 12, lines 42 – 52 (where connection between the core network and the mobile and hence medium accessing are noted, the location of such features compliant with Appellant's discussion in the specification, page 2, lines 18 – 20). Examiner also notes that the combination of Wallentin in view of Wright,

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as discussed later, further clarify and define such concepts of MAC layer and radio resource control information (for example, Wright: column 31, lines 41 -64).

Appellant further asserts that, "Accordingly, Wallentin does not teach or suggest functions more than updating the HLR and/ or VLR when a mobile station is in idle." It is reverently believed that while Wallentin (as well as the combination of Wallentin and Wright) does teach of updating HLR/VLR records for mobile stations in an idle state, Wallentin does also teach of additional features and benefits, such as alluding to mobile stations that subscribe to packet services and further of updating information during a connection (column 4, lines 53 –58 and column 10, lines 45 – 50).

Appellant continues by stating, "Applicants respectfully submit that Wallentin does not maintain communications with an idle state MS as it moves to a new multi-cell area. Again, Applicants respectfully submit the core network in Wallentin is not in forward communication with a mobile station (MS) during an idle state, but merely receives a location update or comparable message to a HLR that provides for location registration when the MS moves from one area to another in an idle state." As noted above, Examiner respectfully believes that Wallentin does teach of maintaining communications when the mobile station moves to a new multi-cell area (for example, in column 4, lines 48 –52, "... the location updating... occurs... when the mobile station is idle..."; note additionally is stated that this works essentially the same for both circuit and packet switched services, as per column 4, lines 47 –52) and further includes provisions for a active connected packet service mobile station (column 4, lines 53 –59). Again, Examiner respectfully believes that though HLR location registration is occurring, additional features, such as forward communications are present (column 12, lines 37 –42).

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Appellant further argues that, "Applicants respectfully submit an initiation of the transferring is recited by 'when said active terminal moves,'" and further that, "Applicants respectfully submit that Wallentin does not teach or suggest at least a feature of a location management unit and combinations thereof as recited in claim 1." It is initially respectfully noted that the specific language of "when said active terminal moves," with reference to an initiation of the transferring, is not directly stated in the claimed language of claims 1 and 8 (though it was noted in claim 8 that a packet data service terminal moves from one old RNC to new RNC). Still, it is respectfully believed that Wallentin does teach or recite the concepts of "a location management unit and combinations thereof' (it was assumed that he "combinations thereof was in reference to the determination of the service state, location, and connection information as stated in claim 1, as no other comments were noted by Appellant). Note specifically that Wallentin teaches of location monitoring throughout (for example column 11, lines 4-26) as noted by Appellant. Additionally Wallentin does teach of connection information (for example in column 12, lines 50 –54 and column 13, lines 40 –48; note the two modes noted in column 10, lines 40 – 50; specifically that the system operates essentially the same for both circuit and packet switched services and the possibility of an active packet connection state as well) and further of service state information (column 10, lines 40 –45, note the mention of different service states; column 13, lines 45 -48, note the mention of routing and location as defined for packet services).

Continuing, Appellant argues that, "Applicants respectfully submit the first citation does not discuss operations occurring during an idle state or medium access control operations; and the second citation discusses a subscriber MAC, which is not part of a core network in Wallentin

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and thus, even if combined with Wallentin, does not teach or suggest any modification to the core network in Wallentin." Examiner respectfully disagrees and believes that Wright, when viewed as whole, does teach or recite the claimed as broadly interpreted. Examiner cited column 28, lines 5-8 as indication of the MAC layer and subscriber units, as noted from Appellant's comments above. Note that it was respectfully believed that the idle state of the mobile station corresponds and further clarifies Wallentin's idle state for a packet subscriber (note once more Wallentin does include provisions for both circuit and packet services as per column 4, lines 42 – 52 and further Wright additionally includes provisions for connection state, for example column 4, lines 51-56). The concepts cited in Wright, column 6, lines 34-50, were further stated as indications of MAC layer, as these are functions commonly performed by the MAC (or medium access control) layer (such as channel reservation for packet transmission on the medium, ie the process of acquiring the medium for transmission or reception, as described for example in Wright, column 4, lines 45 – 56). Continuing, as the link is bi-lateral (as defined in for example in Wright column 6, lines 51 -67 and column 6, lines 25 -33), the process of multiple units accessing the medium, as performed by the MAC layer, would be required by both subscriber (or mobile station) and base station (as the link in Wright reserves the channel in both forward-hence base station to mobile- as well as reverse -mobile to base station- directions; column 6, lines 51 -67 for the forward and column 7, lines 1 –25 for the reverse). It is believed that support for such a concept is provided in Wright, for example column 31, lines 52 – 64, where the base station performs an analysis of the MAC layer state to determine the access to an idle terminal, which is believed to read on the claimed MAC layer state information are maintained at the network. Again, Examiner respectfully notes the commonalities between Wallentin's packet system (both

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in idle and active modes, Wallentin: column 4, lines 45 -58) and Wright's packet based contention system for subscribers in both the idle and active states (Wright: column 27, lines 56 -65 and for example, column 10, lines 41-59).

Appellant continues by stating, "Further, Applicants respectfully submit that column 31, lines 18-39 appear to disclose a state machine for controlling access to a reverse channel by a population of subscriber devices to reduce contention, but does not teach or suggest controlling a handoff operation in either a suspended state or a dormant state in a MAC layer between a mobile station sand a controlling station or modifying a HLR function. See Figure 23 of Wright." Some confusion arose in regards to these comments, as claims 1 and 8 contained no recitation of handoff. Claim 17 was noted as referring to the concept of handoff and it was further noted that, as stated in the above rejection and that seen in paper number 8, Wallentin was cited for these limitations (for example, Wallentin: column 6, lines 55 –63).

Appellant concludes by stating, "Thus, Applicants respectfully submit that Wallentin and Wright, individually or in combination, would not result in at least features of wherein when said active terminal moves from a first one of said radio network controllers to a second one of said radio network controllers in a suspended state or a dormant state, medium access control layer state information and radio resource control information of said active terminal are maintained between said first and second radio network controllers under control of said location management unit and combinations thereof as recited in claim 1." Examiner respectfully disagrees with Appellant's assertion, in light of the above arguments.

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Response to Appellant's arguments, Issue 2, claims 10 and 12 – 15.

Regarding claim 10, Appellant states, "Further, Applicants respectfully submit that even if column 10, lines 45-50 in Wallentin disclose handling routing area updating and paging initiation this is generated to maintain an HLR function or location registration and does not teach or suggest handoff operations in a suspended or dormant state or means to transmit MAC state information and radio resource control information of the PDS active terminal, which can result in sharing and synchronization of information." Note that Wallentin does make reference to the concept of handoff (also known in the art as handover, a used in Wallentin), in column 6, lines 55 -63, again in column 7, lines 28 -37 and again in column 15, lines 26 -34. Note specifically to the last mentioned citation, Wallentin teaches of an SRNC (serving RNC) moveover procedure possible due to handover and further defines the moveover procedure in column 13, lines 40 –53 (the moveover involving the process of changing serving radio network controllers, SRNC, which are defined as the RNC which handles the connection between the mobile station and the network (column 13, lines 42 -47). Further note here that both modes of the invention are cited with this procedure, as per column 13, lines 49 –51 and hence the MAC state and radio resource arguments from issue 1 also apply here (pages 11 - 16).

Continuing, Appellant's state a benefit being, "... which can result in sharing and synchronization of information." As these limitations were not specifically stated in the claimed language, Examiner did not accordingly consider such a benefit. Note though that Wallentin does make reference to an inter-RNC transport that does share (and thus synchronize) information between RNCs (or SRNCs in this case, as per column 6, lines 55 –65). Note here the assumption, from context, was that synchronized was in reference to be arranged to indicate coincidence (as

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in data between RNCs), as opposed to Wright's treatment, dealing with timing (Wright: column 6, lines 35 -39).

Appellant continues by stating, "Further, Applicants respectfully submit that state diagrams shown in Figures 22-23 of Wright do not teach or suggest controlling a handoff operation in either a suspended state or a dormant state in a MAC layer between a mobile station sand a controlling station. In addition, Applicants respectfully submit that state diagrams shown in Figures 22-23 of Wright do not teach or suggest modifying a location registration or HLR update function in Wallentin." Here again, as described above, the inclusion of the state diagrams of Figures 22 and 23, were included as indication of the MAC layer and subscriber units. Again, it was respectfully believed that the idle state of the mobile station corresponds and further clarifies Wallentin's idle state for a packet subscriber (note once more Wallentin does include provisions for both circuit and packet services as per column 4, lines 42 –52 and further Wright additionally includes provisions for connection state, for example column 4, lines 51 – 56). Once more, the concepts cited in Wright column 6, lines 34 - 50, were further cited as indications of MAC layer, as these are functions commonly performed by the MAC (or medium access control) layer (such as channel reservation for packet transmission on the medium, ie the process of acquiring the medium for transmission or reception, as described for example in Wright, column 4, lines 45 – 56). Continuing as above, as the link is bi-lateral (as defined in for example, column 6, lines 51 -67 and column 6, lines 25 -33), the process of multiple units accessing the medium, as performed by the MAC layer, would be required by both subscriber (or mobile station) and base station (as the link in Wright reserves the channel in both forward-hence base station to mobile- as well as reverse -mobile to base station- directions; column 6, lines 51 -

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67 for the forward and column 7, lines 1 –25 for the reverse). It is believed that support for such a concept is provided in Wright, for example column 31, lines 52 – 64, where the base station performs an analysis of the MAC layer state to determine the access to an idle terminal, which is believed to read on the claimed MAC layer state information are maintained at the network. Examiner would respectfully like to note for completeness the commonalities between Wallentin's packet system (both in idle and active modes, column 4, lines 45 –58) and Wright's packet based contention system for subscribers in both the idle and active states (column 27, lines 56 –65 and for example, column 10, lines 41 –59). Lastly Examiner's intent in the inclusion of the Figures was not to "... suggest modifying a location registration or HLR update function in Wallentin," as implied by Appellant and described for Issue 1 above, as it is reverently believed by Examiner that Wallentin's invention encompasses more than these features.

Response to Appellant's arguments, Issue 3, claim 11.

In regards to claim 11, Appellant once more reiterates the arguments seen from Issue 1 and thus respectfully is requested to view the above reply (pages 11 - 16).

Continuing, Appellant reiterates the argument of Wright describing a subscriber MAC and once more is requested to view the above reply seen in Issue 1 (pages 11 - 16).

Lastly, Appellant states, "Applicants respectfully submit Wright does not teach or suggest allowing said current radio network to transfer radio link protocol sate information and radio resource control information of said active terminal to said target radio network controller under control of said location management function if said active terminal is change to said dormant state (from said suspended state) and combinations thereof as recited in claim 11."

Initially note that the limitations of "from said suspended state" were not explicitly noted in the

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claimed language and hence not considered when interpreting the claim. Again as noted for issue 2, handover has been noted as being taught by Wallentin (column 6, lines 55 –63, again in column 7,lines 28 –37 and again in column 15, lines 26 –34) and further that the combination of Wright, as per the reply of Issue 1 further clarify and define such concepts of MAC layer and radio resource control information (for example, Wright: column 31, lines 41 –64) and additionally the handover procedure applies to both modes in Wallentin (column 13, lines 40 –51) and the idle modes defined by Wallentin and Wright, as noted above for Issue 1 (pages 11 – 16) that the idle state of the mobile station corresponds to Wallentin's idle state for a packet subscriber.

Response to Appellant's arguments, Issue 4, claim 16.

In regards to claim 16, Appellant once more reiterates the arguments seen from Issue 1 and thus respectfully is requested to view the above reply (pages 11 - 16).

Continuing, Appellant reiterates the argument of Wright describing a subscriber MAC and once more is requested to view the above reply seen in Issue 1 (pages 11 – 16; note that some confusion existed in this issue as Appellant states "claim 11" and hence the assumption was that the arguments were intended for claim 16). Again Examiner respectfully requests Appellant to review the above cited reply for Issue 3 with respect to the arguments for "...does not teach or suggest..." as seen on paper number 13, page 16, lines 2 – 7, since these limitations appear to recite those verbatim from claim 11. Examiner further notes for completeness, with respect to Appellant's arguments that, "...column 31, lines 18 – 39 appear to disclose a state machine..." (page 16, lines 1 – 2 of paper number 13), that again the combination of Wallentin in view of Wright, though teaching Appellant's described features of lines 1-2; additionally teach

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of "... allowing said current radio resource..." (page 16, lines 3 -7 of paper number 13) as stated for Issue 3 above (pages 19 - 20).

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Response to Appellant's arguments, Issue 5, claims 17 – 18.

In regards to claims 17 and 18, Appellants state that "Applicants respectfully submit that the an inactive handoff as recited in claim 17 is directed to a not active handoff or an idle handoff as described in the specification, for example, at page 11, line 12 -page 12, line 9, of the present specification." Accordingly, Examiner withdraws the rejection for claims 17 and 18 under 35 U.S.C. § 112 only.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Tanmay S Lele Examiner Art Unit 2684 tsl September 29, 2004

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